

10/533,377

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal201txs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 JUL 02 LMedLINE coverage updated
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names
NEWS 4 JUL 02 CHEMCATS accession numbers revised
NEWS 5 JUL 02 CA/CAPLUS enhanced with utility model patents from China
NEWS 6 JUL 16 CAPLUS enhanced with French and German abstracts
NEWS 7 JUL 18 CA/CAPLUS patent coverage enhanced
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification
NEWS 9 JUL 30 USGENE now available on STN
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags
NEWS 11 AUG 06 FSTA enhanced with new thesaurus edition
NEWS 12 AUG 13 CA/CAPLUS enhanced with additional kind codes for granted patents
NEWS 13 AUG 20 CA/CAPLUS enhanced with CAS indexing in pre-1907 records
NEWS 14 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 15 AUG 27 USPATOLD now available on STN
NEWS 16 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 17 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 18 SEP 13 FORIS renamed to SOFIS
NEWS 19 SEP 13 INPADOCDB enhanced with monthly SDI frequency
NEWS 20 SEP 17 CA/CAPLUS enhanced with printed CA page images from 1967-1998
NEWS 21 SEP 17 CAPLUS coverage extended to include traditional medicine patents
NEWS 22 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 23 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 24 OCT 19 BEILSTEIN updated with new compounds

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

10/533,377

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 21:21:02 ON 10 NOV 2007

=> file reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 21:21:13 ON 10 NOV 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 9 NOV 2007 HIGHEST RN 952797-35-2

DICTIONARY FILE UPDATES: 9 NOV 2007 HIGHEST RN 952797-35-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

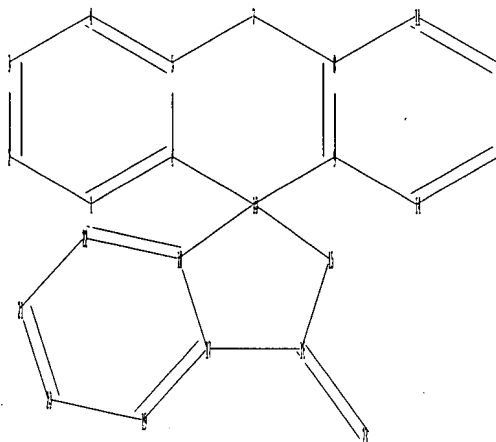
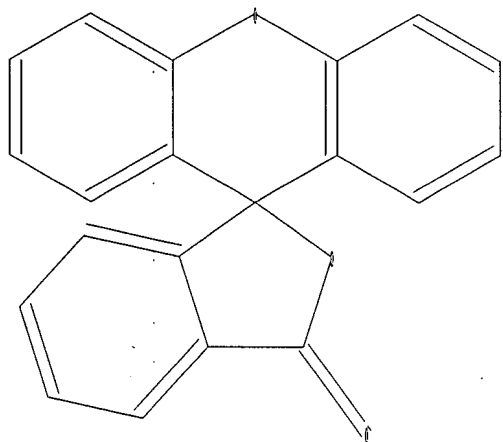
REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10533377.str

10/533,377



chain nodes :

23

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
22

chain bonds :

16-23

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 8-11 9-10 9-14 10-15
10-18 11-12 12-13 13-14 15-16 16-17 17-18 17-19 18-22 19-20 20-21
21-22

exact/norm bonds :

16-23

exact bonds :

5-7 6-10 7-8 9-10 10-15 10-18 15-16 16-17

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-9 8-11 9-14 11-12 12-13 13-14 17-18
17-19 18-22 19-20 20-21 21-22

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom
18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:CLASS

L1 STRUCTURE UPLOADED

=> s 11

SAMPLE SEARCH INITIATED 21:21:34 FILE.'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 833 TO ITERATE

10/533,377

=> s 14 and (prepar? or method or make or making or synthes? or process)

1828766 PREPAR?

133837 PREP

2315 PREPS

135936 PREP

(PREP OR PREPS)

2125686 PREPD

3 PREPDS

2125688 PREPD

(PREPD OR PREPDS)

146675 PREPG

9 PREPGS

146683 PREPG

(PREPG OR PREPGS)

2858263 PREPN

211266 PREPNS

3017389 PREPN

(PREPN OR PREPNS)

5074260 PREPAR?

(PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)

3548243 METHOD

1418435 METHODS

4566798 METHOD

(METHOD OR METHODS)

273407 MAKE

212582 MAKES

470609 MAKE

(MAKE OR MAKES)

329221 MAKING

35 MAKINGS

329250 MAKING

(MAKING OR MAKINGS)

1670374 SYNTHES?

2518307 PROCESS

1716032 PROCESSES

3755651 PROCESS

(PROCESS OR PROCESSES)

L5 18833 L4 AND (PREPAR? OR METHOD OR MAKE OR MAKING OR SYNTHES? OR
PROCE

SS)

=> s 15 and ester

71 ESTHER

11 ESTHERS

82 ESTHER

(ESTHER OR ESTHERS)

L6 0 L5 AND ESTHER

=> s 15 and ester

610455 ESTER

448187 ESTERS

10/533,377

846715 ESTER
(ESTER OR ESTERS)

L7 1496 L5 AND ESTER

=> s 15 and acid ester

4474144 ACID
1600200 ACIDS
4978785 ACID
(ACID OR ACIDS)
610455 ESTER
448187 ESTERS
846715 ESTER
(ESTER OR ESTERS)
149136 ACID ESTER
(ACID(W)ESTER)

L8 208 L5 AND ACID ESTER

=> s 18 and (phthalein or phthalacein or fluorescein)

877 PHTHALEIN
357 PHTHALEINS
1091 PHTHALEIN
(PHTHALEIN OR PHTHALEINS)
0 PHTHALACEIN
27568 FLUORESCIN
259 FLUORESCINS
27645 FLUORESCIN
(FLUORESCIN OR FLUORESCINS)

L9 49 L8 AND (PHTHALEIN OR PHTHALACEIN OR FLUORESCIN)

L

L9 ANSWER 24 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:241720 CAPLUS

DOCUMENT NUMBER: 116:241720

TITLE: Product for improved permanent waving of hair and
simultaneously coloring and permanently waving hair

INVENTOR(S): Schultz, Thomas M.; Patel, Jitendra; Wong,
Stephanie

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: U.S., 6 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|-------------|
| US 5094662 | A | 19920310 | US 1990-612227 | 19901113 |
| US 5188639 | A | 19930223 | US 1992-847788 | 19920306 |
| PRIORITY APPLN. INFO.: | | | US 1990-612227 | A3 19901113 |

10/533,377

AB By combining of a fluorescein-based dye with a mercaptan-based permanent waving composition and maintaining the pH of the resulting composition between .apprx.2.5-4.5, a composition is achieved which simultaneously colors and permanently waves the hair. In addition, even if no coloring or dyeing of the hair is desired, the use of a colorless or complimentary fluorescein-based dye with the mercaptan-based permanent waving composition achieves a composition which imparts a substantially improved curl configuration to the hair as well as substantially longer lasting curls. Preferably, the mercaptan-based permanent waving composition employed comprises an ester of either thioglycolic acid, thiolactic acid, or the amide of 2-aminoethanethiol. Hair treated with 1 part 32.5% glycerin monothioglycolate in glycerin; 1 part 1.50% NH₄Cl in deionized water, 0.005 part D & C Red Number 28 5.0% in deionized water, and preservative q.s.; pH 3.2, had improved curl retention and structural integrity.

Hair

color was dark auburn.

IT 2321-07-5D, Fluorescein, derivs. 15086-94-9

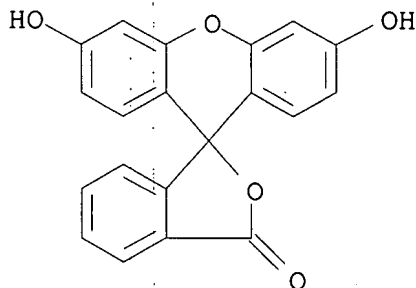
17372-87-1, D&C Red Number 22 18472-87-2

RL: BIOL (Biological study)

(permanent wave and hair dye preparation containing)

RN 2321-07-5 CAPLUS

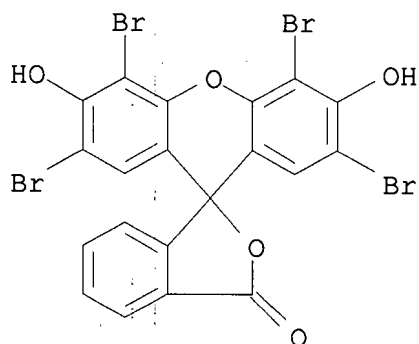
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



RN 15086-94-9 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
2',4',5',7'-tetrabromo-
3',6'-dihydroxy- (CA INDEX NAME)

10/533,377



RN 17372-87-1 CAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
2',4',5',7'-tetrabromo-
3',6'-dihydroxy-, sodium salt (1:2) (CA INDEX NAME)

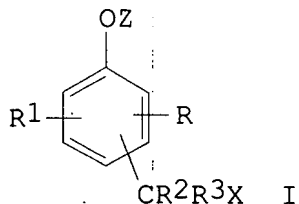
L9 ANSWER 27 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:511969 CAPLUS
DOCUMENT NUMBER: 113:111969
TITLE: Enzyme-controlled-release system using a
quinone-methide elimination reaction mechanism for
use in immunoassays and pharmaceuticals
INVENTOR(S): Meneghini, Frank A.; Palumbo, Paul S.
PATENT ASSIGNEE(S): Polaroid Corp., USA
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|------------|
| WO 9001558 | A1 | 19900222 | WO 1989-US1696 | 19890420 |
| W: JP | | | | |
| RW: DE, FR, GB, IT, NL | | | | |
| US 5112739 | A | 19920512 | US 1988-227141 | 19880802 |
| EP 396642 | A1 | 19901114 | EP 1989-907960 | 19890420 |
| EP 396642 | B1 | 19940511 | | |
| R: DE, FR, GB, IT, NL | | | | |
| JP 03500367 | T | 19910131 | JP 1989-507309 | 19890420 |
| CA 1336586 | C | 19950808 | CA 1989-598563 | 19890503 |
| PRIORITY APPLN. INFO.: | | | US 1988-227141 | A 19880802 |
| | | | WO 1989-US1696 | W 19890420 |

10/533,377

OTHER SOURCE(S):
GI

MARPAT 113:111969



AB An enzyme-controlled-release system uses compound I (R, R1, R2, R3 = H, substituent affecting the mobility or reactivity of the compound, or a substituent including a biol. active group; X = leaving group and may

be

an organic, organometallic, or inorg. moiety; Z = enzyme substrate cleavable

by an active enzyme; CR2R3X is either ortho or para to the OZ moiety).

An

active enzyme cleaves the substrate, Z; the resultant active intermediate

undergoes a quinone-methide elimination reaction to release the leaving group X. The system is useful for detecting an analyte of interest and may be used in, e.g., immunoassays, enzyme amplification systems, and the

release of pharmacol. active ligands.

(4-Resorufinylmethyl-2-nitrophenyl)-

2,3,4,6-tetra-O-acetyl- β -D-galactopyranoside was prepared by heating a solution of

(4-chloromethyl-2-nitrophenyl)-2,3,4,6-tetra-O-acetyl-

β -D-galactopyranoside (preparation given), Na resorufin, and a catalytic amount of NaI in dry DMF at 70° for 4 h. The galactosyl acetate protecting groups were removed with NaOMe. When the galactopyranoside was treated with β -galactosidase, the leaving group release rate was 0.25 (compared with 1.0 for o-nitrophenolgalactoside).

IT 2321-07-5, Fluorescein 2321-07-5D,

Fluorescein, derivs. 3086-44-0D, Rhodol, derivs.

RL: ANST (Analytical study)

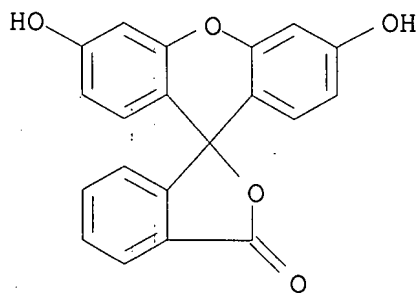
(enzyme-controlled-release compound containing, quinone-methide elimination

in, for immunochem. anal.)

RN 2321-07-5 CAPLUS

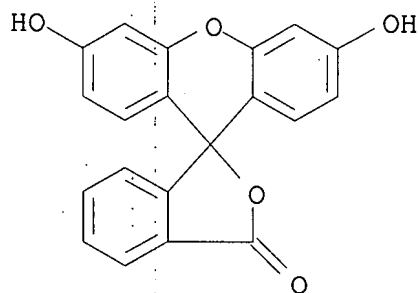
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)

10/533,377



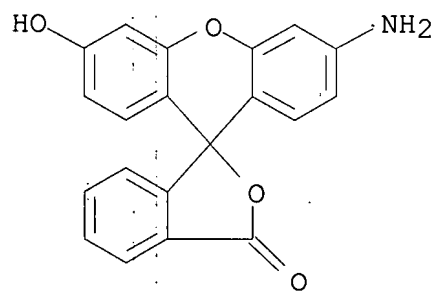
RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)



RN 3086-44-0 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3'-amino-6'-hydroxy- (CA INDEX NAME)



L9 ANSWER 28 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:570653 CAPLUS

DOCUMENT NUMBER: 111:170653

TITLE: Novel amphiphilic nucleic acid conjugates with more efficient membrane transport, their preparation and use

10/533,377

INVENTOR(S): Tullis, Richard H.
PATENT ASSIGNEE(S): Synthetic Genetics, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|------------|
| WO 8809810 | A1 | 19881215 | WO 1988-US2009 | 19880611 |
| W: JP | | | | |
| RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| US 4904582 | A | 19900227 | US 1987-61874 | 19870611 |
| EP 321548 | A1 | 19890628 | EP 1988-906384 | 19880611 |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| JP 03500530 | T | 19910207 | JP 1988-505633 | 19880611 |
| PRIORITY APPLN. INFO.: | | | US 1987-61874 | A 19870611 |
| | | | WO 1988-US2009 | W 19880611 |

AB Novel nucleic acid conjugates are prepared comprising a relatively short nucleic acid sequence complementary to a sequence of interest for modifying intracellular expression, a linking group, and a group imparting

amphiphilic character, usually more hydrophobic than hydrophilic. The resulting conjugates are more efficient in membrane transport and can cross the membrane and effectively modulate the transcriptional system. Oligonucleotides 20 bases long (synthesized antisense to mouse β -globin mRNA) were conjugated at the 5'-terminal to PEG using imidazole-activated carboxylic acid esters and bis-aminoalkyl PEG. At 15 μ M the conjugate selectively inhibited Hb synthesis in cultured Friend murine erythroleukemia cells by 95% compared to 0%, 24%, and 78% inhibition with DMSO, PEG, and PEG + the oligonucleotide, resp., at 100 μ M.

IT 2321-07-5D, Fluorescein, oligonucleotide conjugates

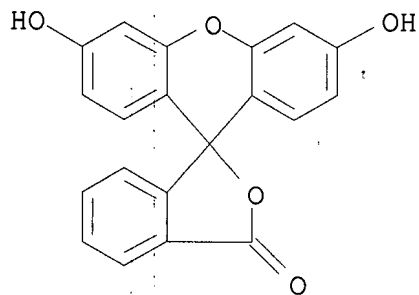
RL: ANST (Analytical study)

(mRNA maturation or translation inhibition by)

RN 2321-07-5 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy- (CA INDEX NAME)

10/533,377

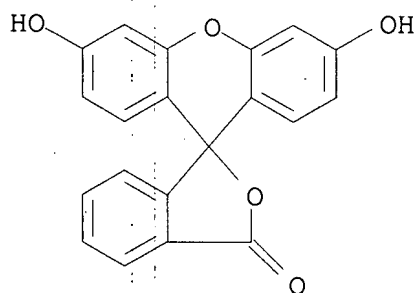


IT 27072-45-3, FITC

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with diamine and oligonucleotide)

RN 27072-45-3 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-5(or 6)-isothiocyanato- (CA INDEX NAME)



L9 ANSWER 29 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:551435 CAPLUS

DOCUMENT NUMBER: 109:151435

TITLE: The characterization of metal-containing polymeric dyes for control of polymer degradation

AUTHOR(S): Carraher, Charles E., Jr.; Linville, Raymond J.; Stevison, Donald F.; Foster, Van R.; Williams, Melanie; Aloï, Mary Jo

CORPORATE SOURCE: Dep. Chem., Florida Atlantic Univ., Boca Raton, FL, 33431, USA

SOURCE: Polymeric Materials Science and Engineering (1988), 58, 85-9

CODEN: PMSEDG; ISSN: 0743-0515

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The title dyes were prepared by copolymerization of R₂SnCl₂ (R = Me, Et, Bu,

10/533,377

Ph, cyclohexyl) with eosin Y, mercurochrome, phloxine B, eosin B, fluorescein, or Rose Bengal and tested for inhibition of *A. niger* in acrylic latex pastes. Polymeric dyes prepared from biscyclopentadienyltitanium dichloride were also discussed.

IT 89761-57-9 116828-87-6 116828-90-1
116828-91-2 116852-57-4 116852-58-5

RL: USES (Uses)

(bactericidal properties of colored)

RN 89761-57-9 CAPLUS

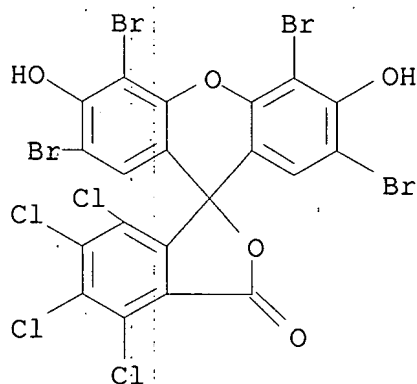
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
2',4',5',7'-tetrabromo-

4,5,6,7-tetrachloro-3',6'-dihydroxy-, disodium salt, polymer with
dichlorodiphenylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 18472-87-2

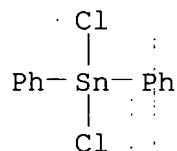
CMF C20 H4 Br4 Cl4 O5 . 2 Na



CM 2

CRN 1135-99-5

CMF C12 H10 Cl2 Sn



10/533,377

RN 116828-87-6 CAPLUS

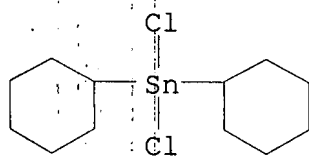
CN Mercury,

(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodicyclohexylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 3342-69-6

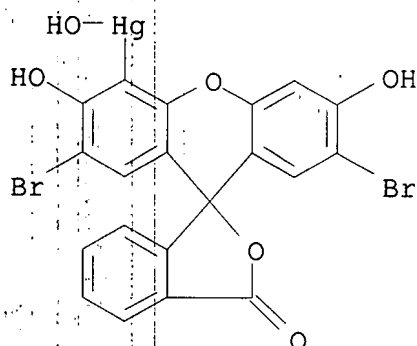
CMF C12 H22 Cl2 Sn



CM 2

CRN 129-16-8

CMF C20 H10 Br2 Hg O6 . 2 Na



● 2 Na

RN 116828-90-1 CAPLUS

CN Mercury,

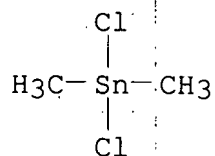
(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodimethylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 753-73-1

10/533,377

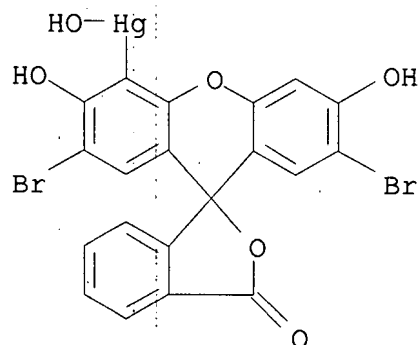
CMF C2 H6 Cl2 Sn



CM 2

CRN 129-16-8

CMF C20 H10 Br2 Hg O6 . 2 Na



●2 Na

RN 116828-91-2 CAPLUS

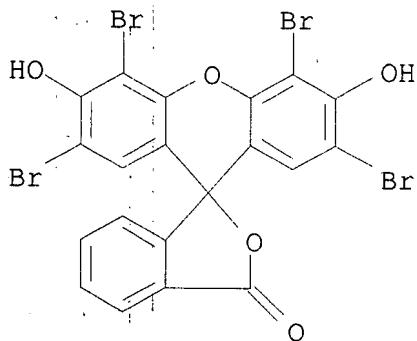
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
2',4',5',7'-tetrabromo-

3',6'-dihydroxy-, disodium salt, polymer with dichlorodimethylstannane
(9CI) (CA INDEX NAME)

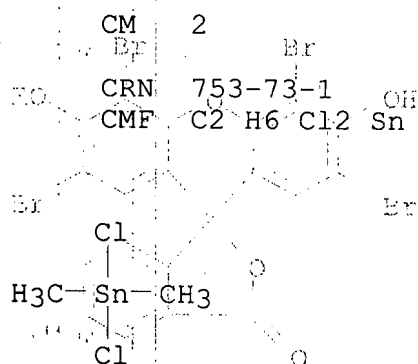
CM 1

CRN 17372-87-1

CMF C20 H8 Br4 O5 . 2 Na



10/333,577 2 Na



RN 116852-57-4 CAPLUS

CN Mercury,

(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dibutyldichlorostannane (9CI) (CA INDEX NAME)

CM 1

CRN 753-73-1

CMF C8 H18 Cl2 Sn

Cl

n-Bu-Sn-Bu-n

Cl

RN 116852-57-4 CAPLUS

CN Mercury,

(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dibutyldichlorostannane (9CI) Page 1600X 2000

CM 1

CRN 753-73-1

CMF C8 H18 Cl2 Sn

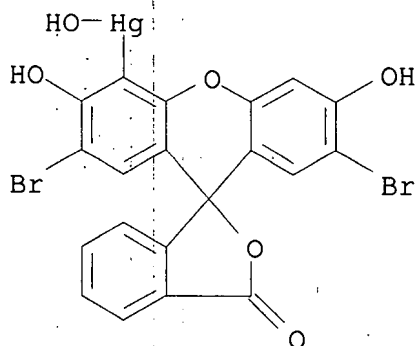
Cl

10/533,377

CM 2

CRN 129-16-8

CMF C20 H10 Br2 Hg O6 . 2 Na



● 2 Na

RN 116852-58-5 CAPLUS

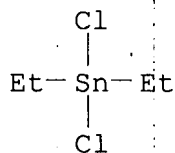
CN Mercury,

(2',7'-dibromo-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl)hydroxy-, disodium salt, polymer with dichlorodiethylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 866-55-7

CMF C4 H10 Cl2 Sn

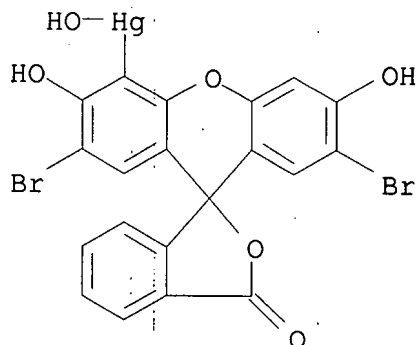


CM 2

CRN 129-16-8

CMF C20 H10 Br2 Hg O6 . 2 Na

10/533,377



●2 Na

IT 89761-58-0 89777-76-4 116828-89-8

RL: USES (Uses)

(testing of colored, for bactericidal properties)

RN 89761-58-0 CAPLUS

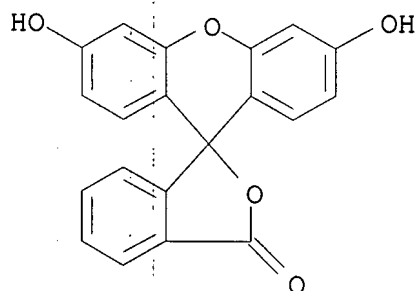
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-, polymer

with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 2321-07-5

CMF C20 H12 O5

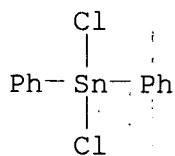


CM 2

CRN 1135-99-5

CMF C12 H10 Cl2 Sn

10/533,377



RN 89777-76-4 CAPLUS

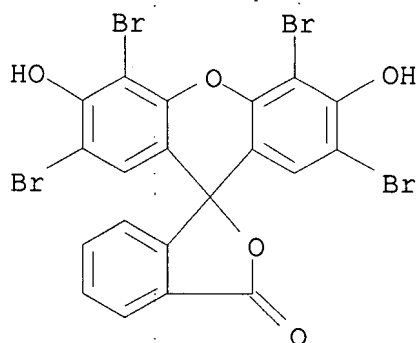
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
2',4',5',7'-tetrabromo-

3',6'-dihydroxy-, disodium salt, polymer with dichlorodiphenylstannane
(9CI) (CA INDEX NAME)

CM 1

CRN 17372-87-1

CMF C20 H8 Br4 O5 . 2 Na

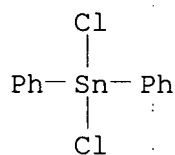


●2 Na

CM 2

CRN 1135-99-5

CMF C12 H10 Cl2 Sn



RN 116828-89-8 CAPLUS

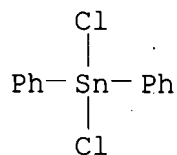
10/533,377

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 4',5'-dibromo-3',6'-dihydroxy-2',7'-dinitro-, disodium salt, polymer with dichlorodiphenylstannane (9CI) (CA INDEX NAME)

CM 1

CRN 1135-99-5

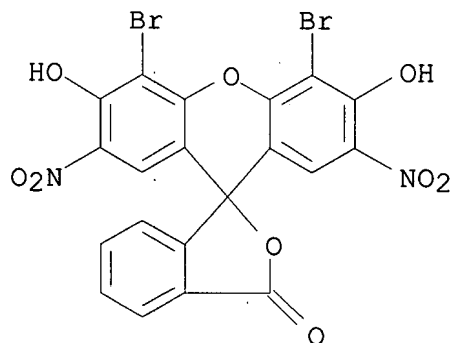
CMF C12 H10 Cl2 Sn



CM 2

CRN 548-24-3

CMF C20 H8 Br2 N2 O9 . 2 Na



● 2 Na

L9 ANSWER 33 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1972:444650 CAPLUS

DOCUMENT NUMBER: 77:44650

ORIGINAL REFERENCE NO.: 77:7391a,7394a

TITLE: Hydrolysis of phthalyl amino acid esters of fluorescein in the presence of leucine aminopeptidase

AUTHOR(S): Thomas, John J.; Eveland, Warren C.; Medzon, Edward L.; Christian, Walter; Wylie, Dwayne E.;

Burckhalter,

Joseph; Jones, Ronald H.
 CORPORATE SOURCE: Dep. Med. Chem., Univ. Michigan, Ann Arbor, MI, USA
 SOURCE: Proceedings of the Society for Experimental Biology
 and Medicine (1972), 140(1), 179-82
 CODEN: PSEBAA; ISSN: 0037-9727

DOCUMENT TYPE: Journal
 LANGUAGE: English

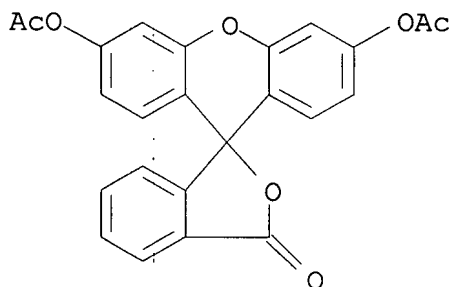
GI For diagram(s), see printed CA Issue.

AB Phthalyl amino acid esters of fluorescein
 were synthesized and characterized. They were tested (in vitro)
 for use as possible fluorogenic substrates for leucine aminopeptidase
 (LAP). The rates of enzymic hydrolysis of these compds. were compared
 with those of some com. available fluorescein esters. The
 phthalyl amino acid esters were hydrolyzed rapidly by
 LAP, lipase, and chymotrypsin and much more slowly by trypsin and
 cholinesterases. The min. detectable LAP concentration was 1 µg/ml
 for d,
 d-bis(α-isopropyl-1,3-dioxo- 2-isoindolinylacetyl)
 fluorescein (d,d-I) to 8 µg/ml for the 1,1-bis(α-isobutyl-
 1,3-dioxo- 2-isoindolinylacetyl)-(1,1- II) and 1,1-bis(α-butyl-1,3-
 dioxo-2-isoindolinylacetyl)fluorescein (1,1-III).

IT 596-09-8 7276-28-0 7298-65-9 7308-90-9
 19722-86-2 36889-44-8 36889-45-9
 36889-46-0 36889-47-1 36889-48-2
 36905-09-6 36984-36-8
 RL: BIOL (Biological study)
 (hydrolysis by leucine aminopeptidase)

RN 596-09-8 CAPLUS

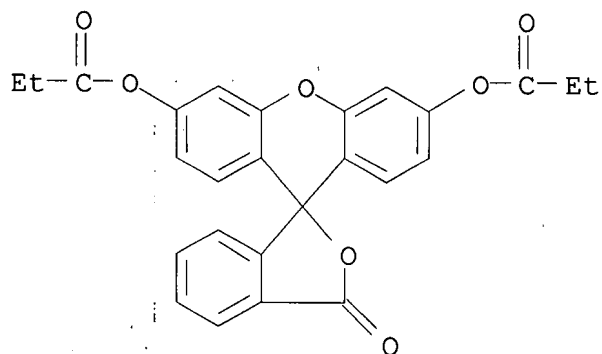
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-bis(acetyloxy)-
 (CA INDEX NAME)



RN 7276-28-0 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one,
 3',6'-bis(1-oxopropoxy)-
 (CA INDEX NAME)

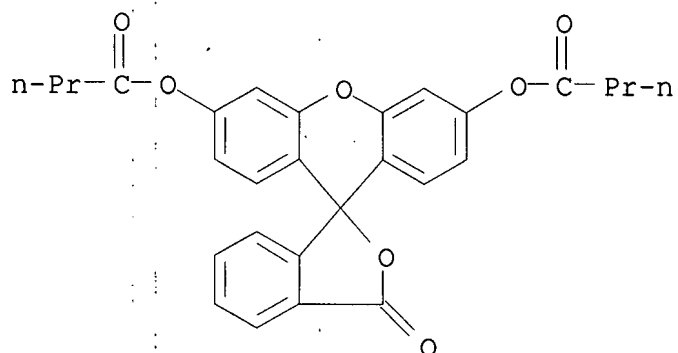
10/533,377



RN 7298-65-9 CAPLUS

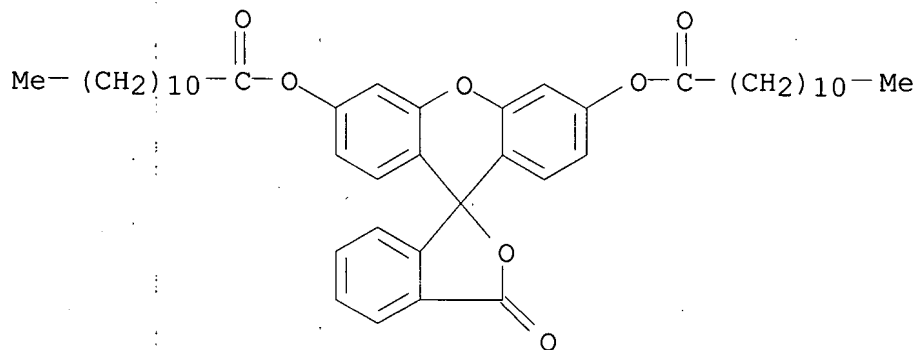
CN Butanoic acid,

1,1'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl) ester (CA INDEX NAME)



RN 7308-90-9 CAPLUS

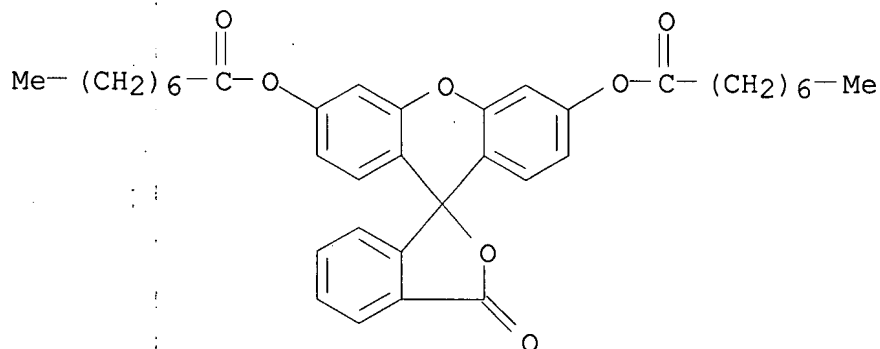
CN Dodecanoic acid, 1,1'-(3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl) ester (CA INDEX NAME)



RN 19722-86-2 CAPLUS

10/533,377

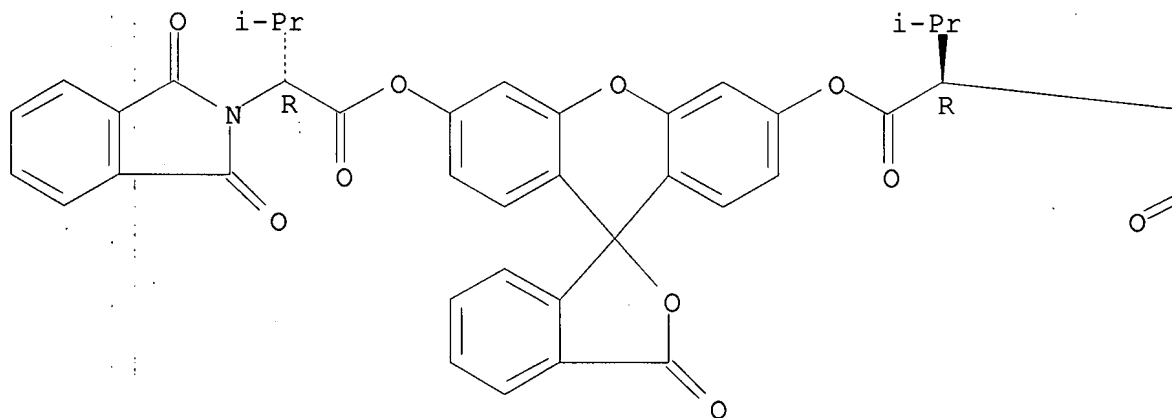
CN Octanoic acid,
1,1'-[3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-
diyl] ester (CA INDEX NAME)



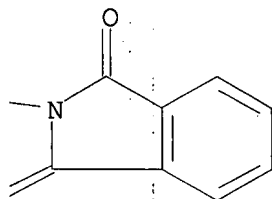
RN 36889-44-8 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro- α -(1-methylethyl)-1,3-dioxo-
, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester,
(R*,R*)-(+)-(9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B



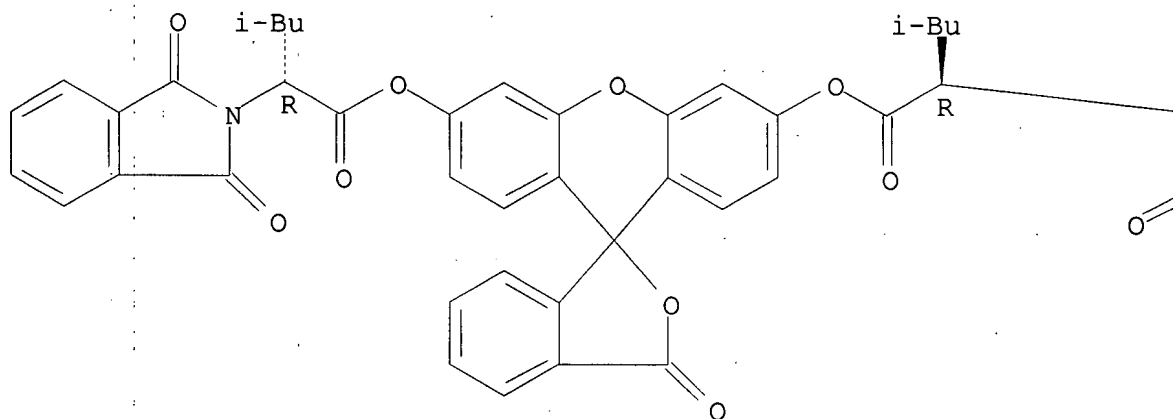
10/533,377

RN 36889-45-9 CAPLUS

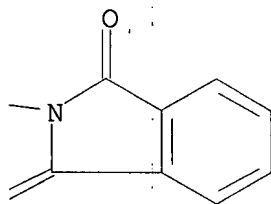
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro- α -(2-methylpropyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B

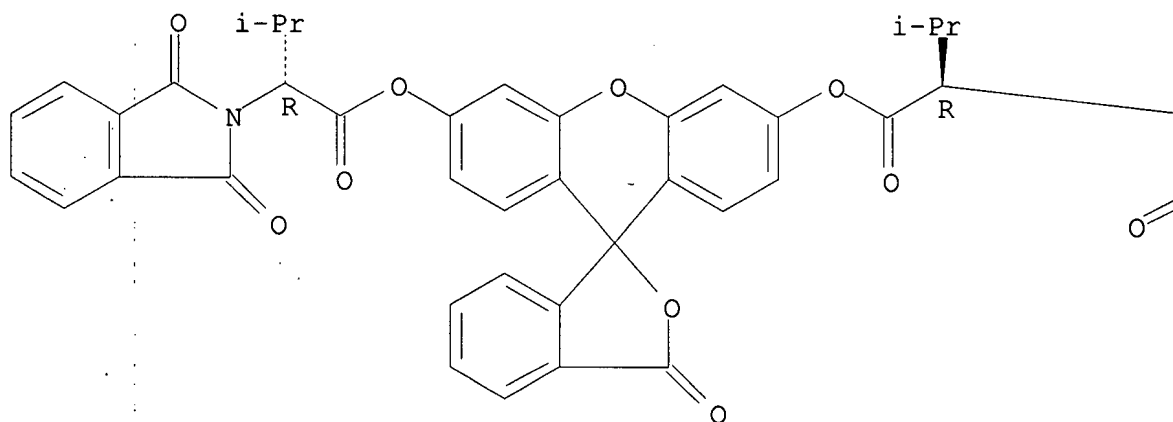


RN 36889-46-0 CAPLUS

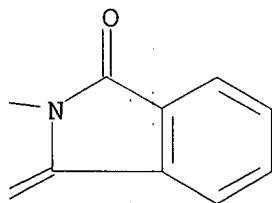
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro- α -(1-methylethyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B

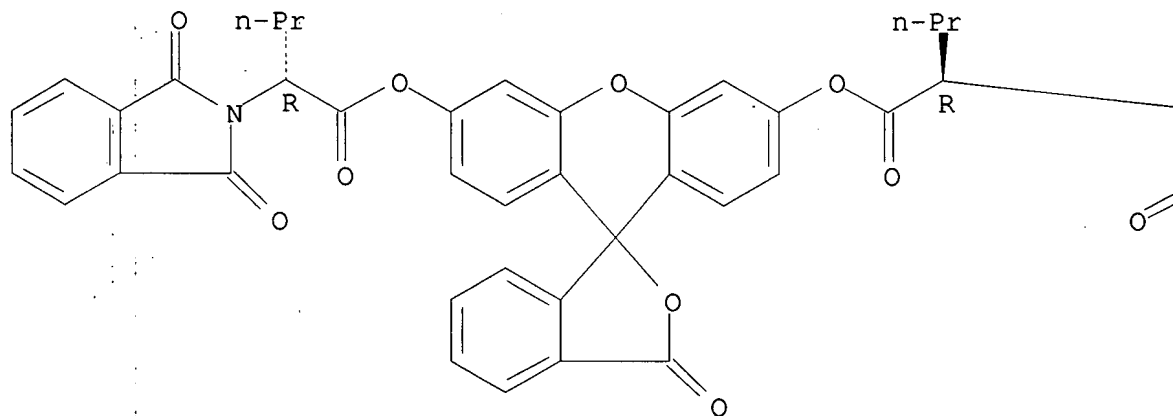


RN 36889-47-1 CAPLUS

CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-1,3-dioxo- α -propyl-,
3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester,
(R*,R*)-(-)- (9CI) (CA INDEX NAME)

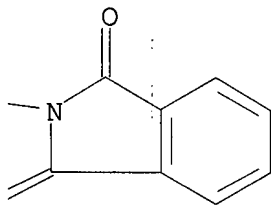
Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



10/533,377

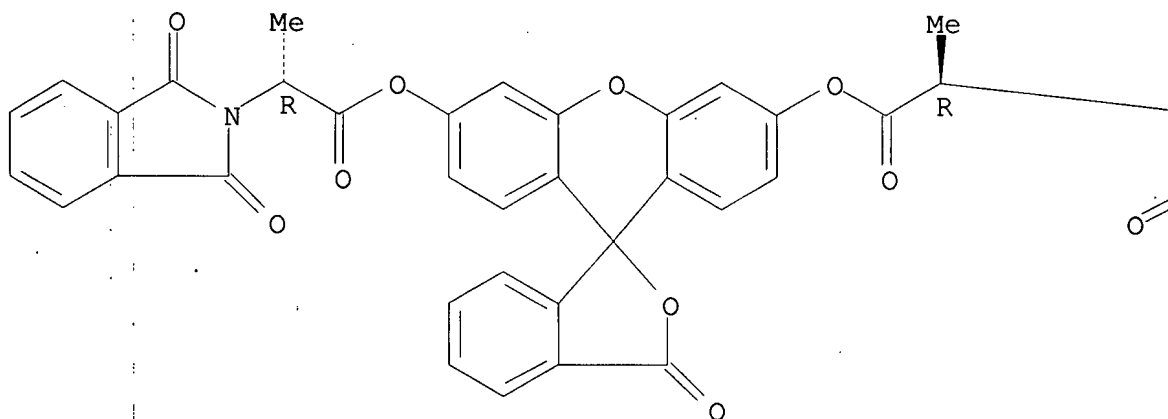
PAGE 1-B



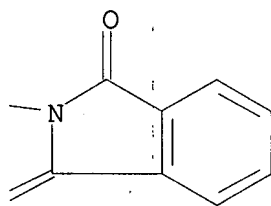
RN 36889-48-2 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro- α -methyl-1,3-dioxo-,
3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester,
(R*,R*)-(-)- (9CI) (CA INDEX NAME)

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B

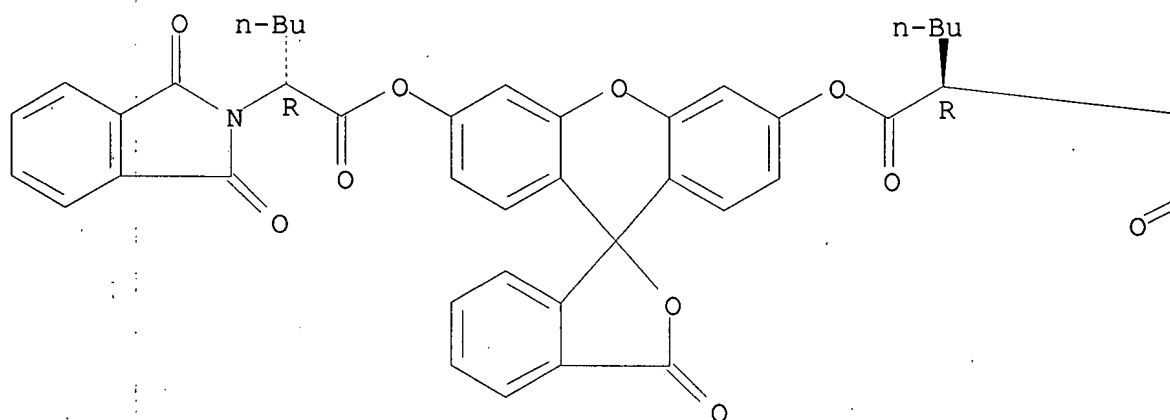


RN 36905-09-6 CAPLUS
CN 2H-Isoindole-2-acetic acid, α -butyl-1,3-dihydro-1,3-dioxo-,
3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthene]-3',6'-diyl ester,
(R*,R*)-(-)- (9CI) (CA INDEX NAME)

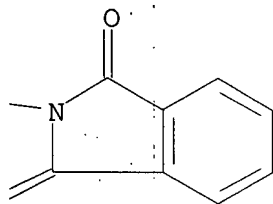
10/533,377

Rotation (-). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B

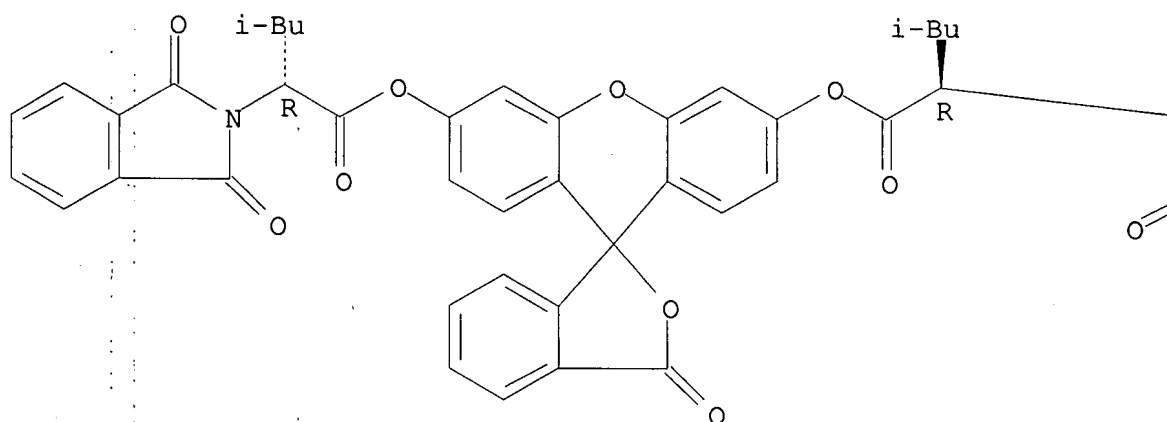


RN 36984-36-8 CAPLUS

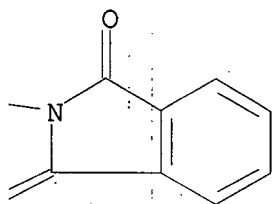
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro- α -(2-methylpropyl)-1,3-dioxo-, 3-oxospiro[isobenzofuran-1(3H), 9'-[9H]xanthene]-3',6'-diyl ester, (R*,R*)-(+)-(9CI) (CA INDEX NAME)

Rotation (+). Absolute stereochemistry unknown.

PAGE 1-A



PAGE 1-B



L

L9 ANSWER 49 OF 49 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1925:16971 CAPLUS

DOCUMENT NUMBER: 19:16971

ORIGINAL REFERENCE NO.: 19:2196i,2197a-g

TITLE: The condensation of resorcinols and a few other aromatic hydroxy compounds with some acids, esters, lactones and lactams

AUTHOR(S): Sen, R. N.; Sircar, S. S.

SOURCE: Quart. J. Indian Chem. Soc. (1924), 1, 151-72

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

AB cf. C. A. 18, 1831. hthalein-like compds. were obtained by heating 1 mol.

HO compound with 2 mols. acid or acid derivative and powdered $ZnCl_2$ 3 h. to

180-200° in a current of dry HCl. Rhodamies were prepared at a lower temperature and without HCl. The product was freed from $ZnCl_2$ by

extraction with HCl, dissolved in alkali and precipitated with dilute HCl or AcOH.

Bromination was carried out by allowing the alc. solution to stand overnight

with a slight excess of Br. Esters react with phenols more readily than

the free acids. It is remarkable that pyrogallol derivs. are not fluorescent in alkaline and organic solns., unlike the resorcinol derivs. In

dibasic acids the 2 CO₂H groups can react successively. Simultaneous reaction can be forced only by drastic means and with poor yields.

Resorcinolgallein (80% yield), dark red, soluble in alkaline and organic solvents

with green-red fluorescence, insol. in AcOH, ether and C₆H₆, dyes brownish

shades on wool and silk, does not m. 250°. Di-Br derivative, red, non-fluorescent in alkali, dyes wool and silk deep red, does not m. 250°. Resorcinol-o-amino-benzein softens 1.75-7° and

closely resembles the salicylein in color, fluorescence, solubility and dyeing

properties. Yield 70%. Di-Br-derivative resembles the salicylein derivative,

decomps. 195° and dyes red shades. K salt dissolves in water with green-red fluorescence changing to bluish red on standing.

Resorcinolstearein softens 152°. The deep red color changes to a bluish tone on standing. The fluorescence is slight but appreciable, the

affinity for wool and silk slight. Resorcinolpyromucein, insol. in C₆H₆

and ether, similar to the stearein in color and fluorescence, has more pronounced dyeing properties, does not m. 250°.

Pyrogallolsalicylein, does not m. 250°; the deep red-brown alkaline and the organic solns. are non-fluorescent; it is soluble in acetone and a mixture of

C₆H₆N and water. Anthranilorhodamine, pink powder, soluble in acids with

green-red fluorescence, more marked in organic solns., dyes wool with a violet-greenish shade. and softens 230°. Yield 60%.

Resorcinolsalicylein, does not m. 260°, and pyrogallolsalicylein were prepared in 85% yield from Me salicylate.

β-Naphtholcoumarein a yellowish brown powder, soluble in NaOH, acetone,

AcOH and concentrated H₂SO₄ with green fluorescence, softens 115° and is

precipitated from alkaline solns. by CO₂. The solubility in NaOH is due to the opening of

the lactone ring, which is confirmed by anal. α-Naphtholcoumarein, a dark brown powder soluble in NaOH with red color and softening 117°, is obtained in 40% yield with considerable tarring. The slight fluorescence in NaOH is attributable to partial o-condensation to a fluoran like substance. Both compds. have a hardly appreciable

affinity

for animal fibers. Pyrogallolcoumarein, analogous to other pyrogallol derivs., does not m. 250°. Coumarinrhodamine dissolves in acids

with violet color and greenish fluorescence more marked in organic solvents,

softens 156° and dyes wool and silk violet shades.

Phenolresorcinolphthalein, prepared in 70% yield from phenolphthalein and resorcinol by heating 4.5 h. to 210-5°, while 3-4 h. heating to 180-200° yields fluorescein, orange powder, somewhat soluble in hot water, resembles fluorescein in alkaline solution, does not m. 250° and dyes a greenish yellow shade.

The

tetra-Br-derivative is an orange powder, soluble in alkali with some fluorescence, dyes in red shades and does not m. 250. The K₂ salt was prepared. The di-Bz-derivative m. 156 8°. Resorcinol-p-cresolphthalein, red, soluble in NaOH with green-red fluorescence less

bright

than that of fluorescein, softens 220° and is precipitated from alkaline solution by CO₂. It forms a K₂ salt. Resorcinolfluorescein,

unlike

fluorescein, insol. in Na₂CO₃, is soluble in NaOH with less bright fluorescence, than fluorescein, decomp. 230°.

Resorcinolisatinein, orange, is soluble in alkali with slight fluorescence,

more marked in concentrated H₂SO₄, dyes orange shades, and does not m. 265°. Yield 75%. Tetra-Br-derivative dyes red shades, decomp. 230°.

Isatinrhodamine, soluble in acids with green-red fluorescence, dyes with an impure violet shade and softens 242°. Pyrogallolisatinein gives non-fluorescent, deeply colored solns. in alkali and organic solvents, does not m. 250°. Phenolisatinein, grayish powder, soluble in alkali with red color, softens 285°. p-Cresolisatinein

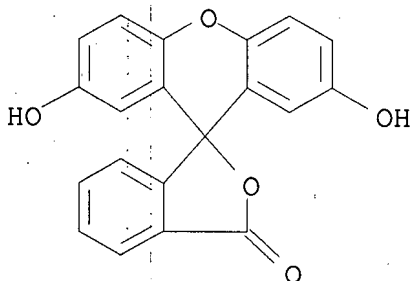
anhydride, soluble in glacial AcOH and concentrated H₂SO₄ with slight fluorescence,

does not m. 250°.

IT 596-04-3, Fluoran, 2,7-dihydroxy-
(constitution of)

RN 596-04-3 CAPLUS

CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',7'-dihydroxy- (9CI)
(CA INDEX NAME)



=> log y

10/533,377

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

294.83

467.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-38.22

-38.22

STN INTERNATIONAL LOGOFF AT 21:32:46 ON 10 NOV 2007